

# Management of patients for fractured neck of femur surgery

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## BACKGROUND

- Hip fractures are increasing as the population ages, with a projected incidence in England of 100,000 annually by 2033.<sup>1</sup>
- Mortality has remains high at 8% at 30 days, and 30% at one year.<sup>2</sup>
- Prompt surgery following pre-optimisation decreases mortality & length of hospital stay.
- Regional anaesthesia should be considered whenever possible.<sup>3,4</sup>

## AIMS

- To assess compliance with standards outlined in the AAGBI guidelines entitled Management of Proximal Femoral Fractures 2011.<sup>3</sup>
- To assess anaesthetic technique employed in our hospital.

## METHODS

### Retrospective audit and re-audit

- Data collected for all patients undergoing surgery for fractured neck of femur over a two week period.
- Initial audit carried out in 2013. Re-audited in 2014 and 2015.

### Standards

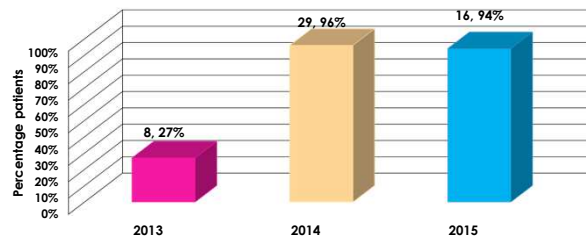
- Trust fractured neck of femur pathway
- 2011 AAGBI guidelines.<sup>3</sup>

### Data collected

- FBC, U&Es, ECG available at preoperative assessment
- Use of preoperative IV fluids
- Operation within 48 hours
- Postponement –by whom and reason
- Time of operation
- Anaesthetic technique
- Grade of surgeon and anaesthetist
- Post op complications
- Mortality at 30 days

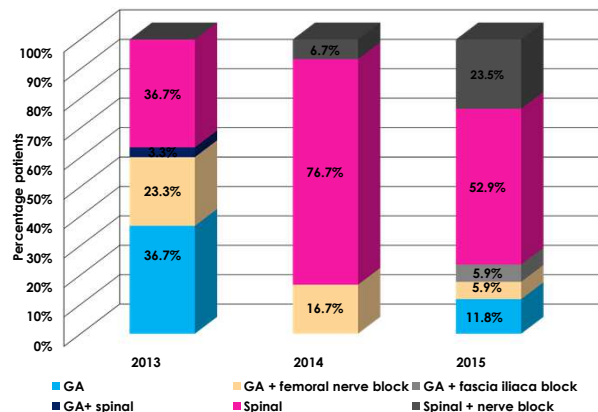
## RESULTS

### Operation within 48 hours



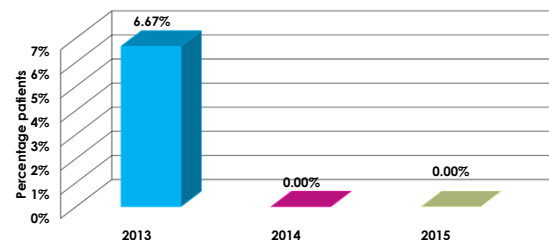
- Total 77 patients.
- Improvement in delays to surgery.

### Anaesthetic technique



- General anaesthetic with spinal is no longer used.
- Use of spinal anaesthesia increased from 40% to 77%, and use of peripheral nerve blocks from 0 to 35.3%.

### 30 day mortality



- In 2015 patient mortality at 60 days was 2 (12%)

## CONCLUSION

- Initial compliance was poor across several of the standards, particularly surgery being carried out within 48 hours, the grade of anaesthetist delivering the anaesthetic, the preoperative investigations and IV fluid therapy.
- Incorporation of induction training on the use of the hospital fractured neck of femur pathway, and emphasis on importance of consultant led care for orthopaedic and anaesthetic teams has improved management across most standards.
- Further improvements would include routine use of regional techniques and a standardised department protocol for doing this, and training in techniques for trainees.
- Use of peripheral nerve blocks could increase, with referral to specialists within the department if necessary.

## REFERENCES

1. White SM, Griffiths R. Projected incidence of proximal femoral fracture in England: a report from the NHS hip fracture Anaesthesia Network (HIPFAN). *Injury* 2010;42:1230-3
2. The National Hip Fracture Database. National report 2013. [http://www.nhfd.co.uk/20/hipfractureR.nsf/0/CA920122A244F2ED802579C900553993/\\$file/NHFD%20Report%202013.pdf](http://www.nhfd.co.uk/20/hipfractureR.nsf/0/CA920122A244F2ED802579C900553993/$file/NHFD%20Report%202013.pdf) (accessed 20.08.2015)
3. Griffiths R, Alper J, Beckinsale, A, et al. Management of proximal femoral fractures 2011. *Anaesthesia* 2012;67:85-98.
4. Scottish Intercollegiate Guidelines Network. Management of hip fracture in older people A national clinical guideline. 2009. <http://www.sign.ac.uk/guidelines/fulltext/111/> (accessed 20.08.2015)